

## REMARKS

Reconsideration of the above-identified application, as amended and in view of the following remarks, is respectfully requested. Claim 1-5, as amended, remain pending herein.

At the outset, Applicant notes with appreciation the indication in the Office Action that claims 2, 4 and 5 recite allowable subject matter. These allowable claims have been rewritten into independent form and are in condition for allowance.

The Abstract has been edited to overcome the objection thereto. Claim 2 has also been edited to remove the duplicate phrase cited in the Office Action and overcome the objection thereto.

Claims 1-5 stand rejected under 35 U.S.C. §112, second paragraph, as the term "the predetermined fields" in line 12 of claim 1 allegedly lacks antecedent basis. Claims 1 and 3 stand rejected 35 U.S.C. §103(a), as allegedly being unpatentable over the APA, which is an IEEE 802.3ah publication entitled "Ethernet in the First Mile Task Force, dated October 2001 and submitted by Applicant as part an Information Disclosure Statement) in view of Han (U.S. 6,873,599). Applicant respectfully overcomes these grounds of rejection for the reasons indicated herein below.

With regard to the rejection under 35 U.S.C. §112, second paragraph, Claim 1 has been amended to recite in part "wherein the loopback process performed by using the loop-back control OAM PDU into which the distinguishing messages of the predetermined fields are added", which is supported in the specification at page 7, line 11-14, and is shown in FIG. 4.

Accordingly, all grounds of rejection under 35 U.S.C. §112 are now overcome. Reconsideration and withdrawal of this ground of rejection are respectfully requested.

(3) With regard to the rejections of claim 1 and 3 under 35 U.S.C. §103(a) over the

combination of APA and Han, claim 1 has been amended to recite in part at step (b) that "the local device and the remote device performing the loop-back process using the loop-back control OAM PDU without sending OAM PDU information messages", which is supported in the specification at page 6, line 17, to page 7, line 4.

Applicant respectfully submits that the combination of APA and Han fails to disclose or render obvious claims 1 and 3, as the combination of references fails to disclose or suggest that a loop-back test process is performed between a local device and a remote device using only one type of message, namely a loop-back control OAM PDU.

For example, with regard to the APA document and Han, Applicant respectfully submits that Han is referring to a hybrid system that does not use OAM (circuit switching 102 and packet switching 104), and utilizes a packet switching gateway 113 and an ATM switch 118. Moreover, Applicant respectfully disagrees with the allegation in the Office Action at page 4, lines 8-21, which allege (referring to FIG. 3) that 5E core 102 is a local device and ATM switch 118 is a remote device. Core 102 (part of circuit switching side 102 shown in FIG. 1) and ATM switch 118 (shown in FIG. 1 as part of packet switching side 104) are two parts of hybrid device 100, and are not a local device and a remote device in an Ethernet passive optical network, as recited in claim 1.

In addition, with regard to the combination of APA and Han, the APA document fails to disclose only one type of message (a loop-control OAM PDU) and sends OAM PDU information messages.

Moreover, Applicant respectfully disagrees with the Office Action regarding page 4 that "APA" (Ethernet First Mile) allegedly shows byte 02 being a response to terminate the loop-back. In contrast, Applicant respectfully submits that byte 02 of "OAM Frame Proposal" indicate

**"TEST Response". Applicant respectfully submits that "TEST Response" is a response to test request 01, not a response to terminate the loop-back.**

Accordingly, at least for all of the foregoing reasons, Applicant respectfully submits that the combination of APA and Han fails to disclose or render obvious either of claims 1 and 3, as the combination fails to disclose the steps of transmitting a loop-back control OAM-PDU requesting an initiation of the loop-back process to a remote device, and the claimed loop-back process termination step.

For at least the above reasons, claims 1 and 3 would not have been obvious to a person of ordinary skill in the art over the combination of APA and Han. Nor would the combination of elements, as recited in claims 1 and 3, have been obvious at the time of invention as being within the ordinary level of skill in the art (*KSR International v. Teleflex*, 127 S.Ct. 1727, 82 USPQ2d 1385 (2007)).


In view of the foregoing, Applicant respectfully submits that all grounds of objection and rejection have been overcome, and all of the claims are in condition for allowance. A Notice of Allowance is respectfully requested.

The Examiner is invited to contact the undersigned in the event of any perceived outstanding issues so that passage of the case to issue can be realized without the need for a further Office Action.

A check is enclosed for \$210 for one additional independent claim fee. While no other fees are believed due at this time, please credit any overage or charge any deficiency to Deposit Account 502-470.

Respectfully submitted,

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Date: January 23, 2008

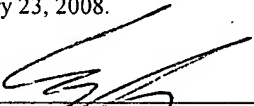
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(Signature and Date)